CLAIMS

1. A resin molded article for electric part, which is characterized by one resulting from molding and solidifying a resin composition containing a thermoplastic polymer, a crosslinking agent comprising a polyfunctional monomer or oligomer containing an unsaturated group in ends of the major skeleton, an inorganic filler, and a reinforcing fiber and then crosslinking said thermoplastic polymer by heating or radiations.

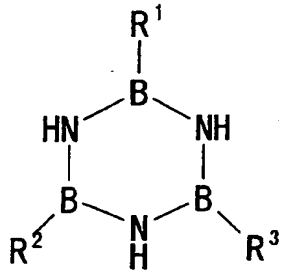
2. The resin molded article for electric part according to claim 1, wherein at least said trifunctional crosslinking agent is contained as said crosslinking agent.

3. The resin molded article for electric part according to claim 1 or 2, wherein two or more kinds of said polyfunctional crosslinking agent are used in combination as said crosslinking agent.

4. The resin molded article for electric part according to any one of claims 1 to 3, wherein said thermoplastic polymer is a polyamide based resin, and the major skeleton of said crosslinking agent is an N element-containing cyclic compound.

5. The resin molded article for electric part according to any one of claims 1 to 4, wherein said crosslinking agent is a compound represented by the following

general formula (I):



... (I)

wherein R^1 to R^3 each represents a group selected from -O-R^4-CR^5=CH_2, -R^4-OOC-CR^5=CH_2, -R^4-CR^5=CH_2, -HNOC-CR^5=CH_2, and -HN-CH_2-CR^5=CH_2; R^4 represents an alkylene group having from 1 to 5 carbon atoms; R^5 represents hydrogen or a methyl group; and R^1 to R^3 may be the same or different.

6. The resin molded article for electric part according to any one of claims 1 to 5, wherein said crosslinking agent is contained in an amount of from 0.5 to 10 parts by weight based on 100 parts by weight of said thermoplastic polymer.

7. The resin molded article for electric part according to any one of claims 1 to 6, wherein said reinforcing fiber is contained in an amount of from 5 to 40 % by weight based the whole of said resin composition, and said reinforcing fiber is a glass fiber the surface of which has been treated with a resin.

8. The resin molded article for electric part according to any one of claims 1 to 7, wherein said inorganic filler is contained in an amount of from 1 to 15 % by weight

based on the whole of said resin composition.

9. The resin molded article for electric part according to claim 8, wherein stratiform clay having a silicate layer laminated therein is contained as said inorganic filler, and said stratiform clay is contained in an amount of from 1 to 10 % by weight based on the whole of said resin composition.

10. The resin molded article for electric part according to any one of claims 1 to 9, wherein said resin composition contains a flame retarder, and said flame retarder is contained in an amount of from 2 to 35 % by weight based on the whole of said resin composition.

11. The resin molded article for electric part according to claim 10, wherein a monofunctional organophosphorus compound containing one unsaturated group in the end thereof is contained as said flame retarder.

12. The resin molded article for electric part according to any one of claims 1 to 11, wherein said electric part is used for an electromagnetic switch.

13. A production process of a resin molded article for electric part, which is characterized by including an adsorbing step for adsorbing a crosslinking agent comprising a polyfunctional monomer or oligomer containing an unsaturated group in ends of the major skeleton onto an inorganic filler; a kneading step for kneading a resin

composition containing the inorganic filler after the adsorption, a thermoplastic polymer, and a reinforcing fiber; a step for injecting molding said kneaded resin composition; and a crosslinking step for taking out said resin composition after the injection step from a mold and heating it or irradiating it with radiations.

14. The production process of a resin molded article for electric part according to claim 13, wherein electron beams or γ-rays having a dosage of 10 kGy or more are irradiated for the irradiation with radiations in said crosslinking step.

15. The production process of a resin molded article for electric part according to claim 13, wherein the heating is performed at a temperature of at least 5 °C higher than the temperature of said injection molding for the heating in said crosslinking step.

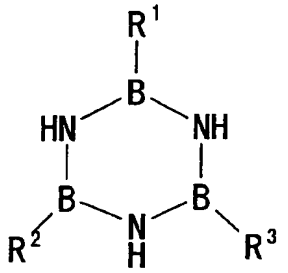
16. The production process of a resin molded article for electric part according to any one of claims 13 to 15, wherein at least said trifunctional crosslinking agent is contained as said crosslinking agent.

17. The production process of a resin molded article for electric part according to any one of claims 13 or 16, wherein two or more kinds of said polyfunctional crosslinking agent are used in combination as said crosslinking agent.

18. The production process of a resin molded article for electric part according to any one of claims 13 to 17,

wherein said thermoplastic polymer is a polyamide based resin, and the major skeleton of said crosslinking agent is an N element-containing cyclic compound.

19. The production process of a resin molded article for electric part according to any one of claims 13 to 18, wherein said crosslinking agent is a compound represented by the following general formula (I):



... (I)

wherein R^1 to R^3 each represents a group selected from $-O-R^4-CR^5=CH_2$, $-R^4-OOC-CR^5=CH_2$, $-R^4-CR^5=CH_2$, $-HNOC-CR^5=CH_2$, and $-HN-CH_2-CR^5=CH_2$; R^4 represents an alkylene group having from 1 to 5 carbon atoms; R^5 represents hydrogen or a methyl group; and R^1 to R^3 may be the same or different.

20. The production process of a resin molded article for electric part according to any one of claims 13 to 19, wherein said crosslinking agent is contained in an amount of from 0.5 to 10 parts by weight based on 100 parts by weight of said thermoplastic polymer.

21. The production process of a resin molded article for electric part according to any one of claims 13 to 20, wherein said reinforcing fiber is contained in an amount of

from 5 to 40 % by weight based the whole of said resin composition, and said reinforcing fiber is a glass fiber the surface of which has been treated with a resin.

22. The production process of a resin molded article for electric part according to any one of claims 13 to 21, wherein said inorganic filler is contained in an amount of from 1 to 15 % by weight based on the whole of said resin composition.

23. The production process of a resin molded article for electric part according to claim 22, wherein stratiform clay having a silicate layer laminated therein is contained as said inorganic filler, and said stratiform clay is contained in an amount of from 1 to 10 % by weight based on the whole of said resin composition.

24. The production process of a resin molded article for electric part according to any one of claims 13 to 23, wherein said resin composition contains a flame retarder, and said flame retarder is contained in an amount of from 2 to 35 % by weight based on the whole of said resin composition.

25. The production process of a resin molded article for electric part according to claim 24, wherein a monofunctional organophosphorus compound containing one unsaturated group in the end thereof is contained as said flame retarder.

26. The production process of a resin molded article

for electric part according to any one of claims 13 to 25, wherein said electric part is used for an electromagnetic switch.